

### **REMARKS**

The Final Office Action of June 13, 2007, has been carefully reviewed and these remarks are responsive thereto. Reconsideration and allowance of the instant application are respectfully requested. Claims 9 and 21 have been canceled. Claims 1-8, 10-20, and 22-26 are pending. Claims 1, 8, 13, and 20 have been amended. No new material has been added.

#### ***Rejections Under 35 U.S.C. § 102***

Claims 4-5 and 16-17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Application Publication No. 2002/0095486 A1 to Bahl ("Bahl"). Applicant respectfully traverses this rejection.

Claim 4 recites, among other features:

“ listening for transmissions by said station; and  
updating said entry for said station responsive to every transmission by said station.”

The Examiner in the Office Action at page 2 asserts that Bahl discloses the recited features, because Bahl at paragraphs [0030]-[0037] and Fig. 2 allegedly demonstrates that a mobile terminal may query its wireless network interface to determine the address of a wireless access point to which it is connected, and then may transmit this address to a server which is also connected to the access point, with the location then being considered by the server as the location of the mobile terminal and stored in the last known location field. Applicant refers the Examiner specifically to paragraph [0035] of Bahl from which it is believed that the above-noted argument was principally taken from. Bahl at paragraph [0035] demonstrates that *whenever* the location manager 230 *requires* the location of Mobile A 218, it queries the location tracking service 234. Bahl at paragraphs [0013] and [0045] demonstrates that the location tracking service is invoked by the system to determine the mobile user's location when the last update from the mobile user was made a while ago (i.e., outside the threshold). Thus, the update in Bahl occurs once a threshold has been exceeded, as opposed to being responsive to every transmission as recited in claim 4. Applicant reminds the Examiner that a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. MPEP § 2141.02

(VI. Prior Art Must Be Considered In Its Entirety, Including Disclosures That Teach Away From The Claims). Considering Bahl in its entirety, Bahl as a whole teaches away from the recited features, because the update in Bahl occurs responsive to the aforementioned threshold being exceeded. Claim 4 is allowable over Bahl for at least the foregoing reasons.

Dependent claim 5, which depends from claim 4, is allowable for at least the same reasons as claim 4.

Independent claim 16 recites features similar to those described above with respect to claim 4. Thus, claim 16 is allowable for at least those same reasons.

Dependent claim 17, which depends from claim 16, is allowable for at least the same reasons as claim 16.

Claims 8 and 20 stand rejected under 35 U.S.C. § 102(c) as being anticipated by U.S. Patent Application Publication No. 2004/0121810 A1 to Goransson, et al. ("Goransson"). Applicant respectfully traverses this rejection.

Applicant has amended independent claim 8 to incorporate the features previously recited in canceled claim 9. More specifically, claim 8 now recites:

“ wherein an angle of arrival of said station is determined from header information contained in a packet received from said station . . . ”

The Examiner in the Office Action at page 17 contends that U.S. Patent No. 7,043,272 B2 to Park, et al. ("Park") discloses the above noted features. More specifically, it is contented that Park teaches the above noted features in the Abstract and at col. 6, line 24 – col. 7, line 7. Applicant respectfully disagrees. The cited passages in Park merely demonstrate that a forward beamforming weight controller 207 stores calculated transmission beamforming weights, which steer corresponding angle areas divided by the arrival angle range estimator 204, and transfers the beamforming weights steering the estimated angle of arrival (AOA) range to the forward beamformer and modulator 206. Applicant fails to see how the cited passages in Park (or any passage in Park for that matter) teach or suggest determining an angle of arrival of a station from header information contained in a packet received from the station as recited in claim 8. Applicant submits that Goransson and Park both fail to teach or suggest the above noted features. Thus,

notwithstanding whether Goransson and Park are properly combinable, the resultant combination fails to teach or suggest the features recited in claim 8. Claim 8 is allowable for at least these reasons.

Applicant has amended independent claim 20 to recite the features of canceled claim 21. Applicant submits that amended claim 20 is allowable over Goransson (and Park) for substantially the same reasons discussed above with respect to claim 8.

Claims 25 and 26 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Park. Applicant respectfully traverses this rejection.

Independent claim 25 recites:

“An access point comprising:

... determining the angle of arrival of said packets ...”

Applicant refers the Examiner to the substantive remarks included in the Amendment filed March 29, 2007 at pages 8-9. Applicant incorporates those remarks herein by way of reference. Applicant maintains that if the above noted feature of determining an angle of arrival of said packets is demonstrated in Park, that the determination, at most, is conducted at the terminal disclosed in Park. Applicant reminds the Examiner of MPEP § 2141.02 (VI. Prior Art Must Be Considered In Its Entirety, Including Disclosures That Teach Away From The Claims). Moreover, Applicant respectfully disagrees with the Examiner's assertion in the Office Action at page 5 that Park (at col. 8, lines 48-52) can be read as disclosing the recited features. More specifically, one skilled in the art would appreciate that the determining step recited in independent claim 25 would only be conducted at one of the access point (e.g., base station) or at a mobile station (e.g., terminal); Applicant submits that it would not make sense to incorporate the determining step at both locations because the duplication would represent an unnecessary waste of computing resources. In view of the fact that Park at col. 8, lines 56-59 demonstrates that the terminal (e.g., the alleged mobile station) calculates a user pilot signal power for each time area and feeds a time area number corresponding to the greatest power back to the base station, the determination in Park takes place at the terminal. Park at col. 8, lines 60-63 goes on to demonstrate that the base station transmits a data channel signal using beamforming weights corresponding to the time area

number determined by the terminal. Applicant submits that, in Park, the base station is merely a passive entity that responds to the calculation (e.g., determination) conducted by the terminal. Claim 25 is patentably distinguishable over Park for at least the foregoing reasons.

Claim 26, which depends from claim 25, is allowable for at least the same reasons as claim 25.

***Rejections Under 35 U.S.C. § 103***

Claims 1-3 and 13-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Goransson in view of U.S. Patent No. 7,136,624 B2 to Ofuji, et al. ("Ofuji"). Applicant respectfully traverses this rejection.

Amended claim 1 recites,

“ ... wherein an angle of arrival of said mobile station is determined from header information contained in said header, and wherein said forming step determines if said mobile station is covered by comparing said angle of arrival of said mobile station with angles covered by said basis beam.”

These features are similar to those cited above with respect to claim 8. As per the discussion above with respect to claim 8, Goransson fails to teach or suggest the above noted features. Ofuji fails to remedy the deficiencies of Goransson with respect to these features. Thus, notwithstanding whether the proposed combination of Goransson and Ofuji is proper, the resultant combination fails to result in at least the above noted features as recited in claim 1. Claim 1 is allowable for at least these reasons.

Dependent claims 2-3, which depend from claim 1, are allowable for at least the same reasons as claim 1.

Amended independent claim 13 recites features similar to those described above with respect to claim 1. Claim 13 is allowable for substantially the same reasons as discussed above with respect to claim 1.

Dependent claims 14-15, which depend from claim 13, are allowable for at least the same reasons as claim 13.

Claims 6-7 and 18-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bahl in view of Park. Applicant respectfully traverses this rejection.

Notwithstanding whether Bahl is properly combinable with Park, Park fails to cure the above noted deficiencies of Bahl with respect to independent claim 4. Thus, dependent claims 6-7, which depend from claim 4, are allowable over the proposed combination of Bahl and Park for at least the same reasons as claim 4.

Notwithstanding whether Bahl is properly combinable with Park, Park fails to cure the above noted deficiencies of Bahl with respect to independent claim 16. Thus, dependent claims 18-19, which depend from claim 16, are allowable over the proposed combination of Bahl and Park for at least the same reasons as claim 16.

Claims 9-12 and 21-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Goransson in view of Park. Applicant respectfully traverses this rejection.

Claims 9 and 21 have been canceled by the present paper, thus rendering the corresponding rejection to the referenced claims moot. Applicant refers the Examiner to the above discussion regarding independent claims 8 and 20 with respect to the features previously recited in claims 9 and 21.

Claim 10 recites,

“ ... decoding at an access point a first part of a transmitted packet to determine the angle of arrival of said transmitted packet as transmitted from a mobile station ...”

The Examiner at pages 3-4 (and pages 13-14) of the Office Action cites the same passages of Park as were discussed above in relation to independent claim 25. Applicant submits that claim 10 is allowable over Park for at least the same reasons discussed above with respect to claim 25. Moreover, Goransson fails to cure these deficiencies of Park. Thus, notwithstanding whether the combination of Goransson and Park is proper, the combination fails to result in at least these features as recited in claim 10. Claim 10 is therefore allowable.

Dependent claim 11, which depends from claim 10, is allowable for at least the same reasons as claim 10.

Independent claims 12, 22 and 24 recite features similar to those described above with respect to claim 10, and are allowable for at least the same reasons discussed above with respect to claim 10.

Dependent claim 23, which depends from claim 22, is allowable for at least the same reasons as claim 22.

If any fees are required or if an overpayment is made, the Commissioner is authorized to debit or credit our Deposit Account No. 19-0733, accordingly.

All rejections having been addressed, Applicant respectfully submits that the instant application is in condition for allowance, and respectfully solicits prompt notification of the same.

Respectfully submitted,  
BANNER & WITCOFF, LTD.

By: /Christopher R. Glembocki/  
Christopher R. Glembocki  
Reg. No. 38,800

1100 13<sup>th</sup> Street, N.W.  
Suite 1200  
Washington, D.C. 20005-4051

Dated: November 29, 2007